



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,576	10/12/2005	Mikio Furuuchi	279509US3PCT	4764
22850 7590 03/21/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER SINGH, KAVEL	
			ART UNIT 3651	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			NOTIFICATION DATE	
3 MONTHS			03/21/2007	
			DELIVERY MODE ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/21/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,576	<b>Applicant(s)</b> FURUUCHI, MIKIO	
	<b>Examiner</b> Kavel P. Singh	<b>Art Unit</b> 3651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/12/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-11,14, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Long U.S. Patent No. 3,352,406.

Claims 9 and 17, Long teaches a pair of guide rails (30,31) respectively provided with guide surfaces for guiding both side surfaces (82) of a transferred article in a transfer direction are extended in the transfer direction and flexible endless belts (21) for supporting lower surfaces (82) at both sides of the transferred article, whose both side surfaces are guided along the guide surfaces (82), to transfer the transferred article in the transfer direction, are drivingly connected to a drive device and are carried along plural rotational members to be circulated (C5 L1-6), the conveyer comprising: a stretching mechanism provided at one end of each of the guide rails to be stretchable in the transfer direction; a stretchable guide surface provided at a facing surface of the stretching mechanism and formed into a flat surface continuous and even with the guide surface regardless of the stretched position of the stretching mechanism; and plural rotational members provided on the facing surface of the stretching mechanism for circulatably supporting the endless belt (21) (C2 L63-67) and provided with an adjuster

Art Unit: 3651

guide surface which is a flat surface even with the guide surface; and a complementary member (22) insertable into a space which is made between the guide surface of the guide rail (30,31) and the adjuster guide surface of the adjuster member (C,D) when the adjuster member is moved in the moving direction, and provided with a complementary guide surface for forming a stretchable guide surface together with the adjuster guide surface (C3 L38-41).

Claim 10, Long teaches an adjuster member mounted on an end of each guide rail (30,31) to be movable in the transfer direction and provided with an adjuster guide (C,D) surface being a flat surface even with the guide surface; and a complementary member insertable into a space which is made between the guide surface of the guide rail (30,31) and the adjuster guide surface (30,31) of the adjuster member (C,D) when the adjuster member is moved in the transfer direction, and provided with a complementary guide surface (C,D) for forming the stretchable guide surface together with the adjuster guide surface (C3 L38-41).

Claim 11, Long teaches the complementary member (22) is mounted on the end of the guide rail (30,31) to be movable in a complementary direction intersecting with the transfer direction with the complementary guide surface defining a flat surface continuous and even with the guide surface; and the adjuster member (C, D) and the complementary member are joined at respective joint surfaces which are inclined relative to the transfer direction as well as to the complementary direction; whereby the adjuster guide surface and the complementary guide surface are jointed at the

Art Unit: 3651

respective joint surfaces to define the stretchable guide surface as a continuous and even flat surface (C3 L38-41).

Claim 14, Long teaches a feed device (24) for moving the adjuster member (C,D) in the transfer direction; and means for moving the complementary member (22) in the complementary direction in linkage relation with the movement of the adjuster member (C,D) (C3 L30-35).

Claim 16, Long teaches a method of mounting an adjuster member (C, D), which is provided with an adjuster guide surface being a flat surface even with the guide surface, on one end of each guide rail (30,31) to be movable in the transfer direction; providing a complementary member (22), which is provided with a complementary guide surface being a flat surface even with the guide surface, to be movable in the complementary direction intersecting with the transfer direction, with the guide surface and the complementary guide surface defining a continuous and even flat surface; and joining the adjuster member and the complementary member at respective joint surfaces which are inclined relative to the transfer direction and the complementary direction so that a stretchable guide surface is formed by joining the adjuster guide surface and the complementary guide surface along the joint surfaces to define the continuous and even flat surface (C3 L38-41).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 3651

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Long U.S. Patent No. 3,352,406 in view of Middlesworth U.S. Patent No. 3,355,007.

Claims 12 and 13, Long teaches the adjuster member (C.D) and complementary member complementary direction is a vertical direction perpendicular to the transfer direction; the adjuster member and the complementary member are joined at the joint surfaces which are inclined 45 degrees relative to the transfer direction; the adjuster guide surface and the complementary guide surface are joined along the joint surfaces to constitute the stretchable guide surface (C3 L38-41), but does not teach a rotation member for winding the traveling portion of the belt. Middlesworth teaches a first rotational member (26) for winding around one end of a horizontally traveling portion of the endless belt (29) and a second rotational member (28) for downwardly bending the endless belt run out from the first rotational member(26) (C2 L55-61); the complementary member has mounted thereon a third rotational (35) member for horizontally bending the endless belt run out from the second rotational member (35) and a fourth rotational member (35) for roughly vertically bending the endless belt (29) bent horizontally; and the guide rail has mounted thereon a fifth rotational (35) member for horizontally bending the endless belt run out from the fourth rotational member (C2 L65-72). It would have been obvious to one of ordinary skill in the art at the time of the invention to use rotational members as taught by Middlesworth into the invention of Long to keep the belt in-line as the belt is being stretched.

Art Unit: 3651

The recitation of the dimension of the angle of the inclined joint surface appear to be an obvious design choice and expedient in view of *Gardner v. TEC Systems Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984). The Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long U.S. Patent No. 3,352,406 in view of Kane U.S. Patent No. 6,012,568.

Claim 15, Long teaches the transferred article, but not as Kane teaches a transfer system for printed board or a board for mounting electronic components thereon (C3 L28-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the handling of printer board or board for mounting electronic components as taught by Kane into the invention of Long to diversify the usage of the conveyor system.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 5,878,868; 6,843,365; 6,935,487.

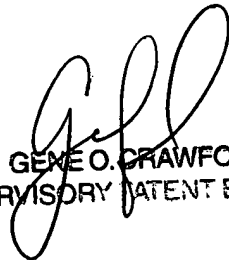
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Kavel P. Singh whose telephone number is (571) 272-2362. The examiner can normally be reached on M-F 8:30-5.

Art Unit: 3651

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KPS

  
GENE O. CRAWFORD  
SUPERVISORY PATENT EXAMINER